



Allergy free Food Recommendation System

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ABSTRACT

Due to the tremendous amount of data on internet, web data mining has become very necessary. The system contains the number of different food products. Registering into the application, the system will acquire all the detailed information of the user for providing online services. Selecting the user required products and order is placed. This system contains the online services providing allergy-safe food recipes. The allergy-free ingredients could be extracted from the large number of the ordinary food recipes. By considering food context for allergy ingredients, the precision of extracting allergy-free ingredients can be improved. Predicting the missing items from dataset is indefinite area of research in Web Data Mining. On the basis of the users feedback (ratings/comments) the system gives preferences according to the highest rating. The proposed approach extends advantages of prediction at a higher level abstraction and reduced rule generation complexity.

Keywords - Food allergy, allergy-free ingredient.

1. INTRODUCTION

In order to enrich our daily diet, it is essential to make a menu plan for enjoying the food as well as considering nutritional balance. But, for food-allergenic patients, allergy ingredients must be removed from a food, and therefore, they feel stress for not eating what they want to eat, freely. In this project, we propose a system where allergy-free food products based on the allergy specified by the customer extracted from their details at the time of registration. By considering the food context for allergy ingredients, the precision of extracting allergy-free ingredients can be improved [5]. Data mining is used to extract the significant patterns from data. The process of mining this web data to inferred knowledge, relevant features and patterns is known as web mining [4][8]. In opinion mining, system will analyze user comments/feedback given for food items. It also includes adjectives separation. The project predicts the missing item recommendations according to the information given by the user during registration. Data mining is used to extract the significant patterns from data. We have many online services for providing allergy-safe food recipes, but the number of the allergy-safe food products is very small compared to ordinary food products. In present system there are many food products providers where they have many customers every day. Handling customers with better services for taking order, complete work in limited time and provide accurate services in time limit. In order to provide this service existing system is not efficient. Here we provide a simple software application through which ordering system can be made easy, sales can be calculated and reports can be generated for every day and month. This system allows user to check and purchase various food product available online. The project consist of list of food products displayed in various categories and the user can browse through the items. User can add the selected item it to his shopping carts[8]. Users needs to register on the site before checking out. In addition, SQL serves as a backend to store the bakery product list data. Thus the project brings an entire food product online and it easy for both buyer and seller.

2. RELATED WORK

These technologies bring potential benefits by enhancing the regular food shop and making it online by providing some advanced services along with the some primary ones. Association rule mining, clustering, classification, and web mining are methods that implemented. The association mining used for discovering interesting relations among the different entities of databases [4][7]. Our method attaches a food context and allergy-free substitute ingredients to a recipe from known recipes. The metadata of ingredient and equipment are extracted as keywords that are included in a recipe. The process of mining this web data to inferred knowledge, relevant features and patterns is known as web mining. In opinion mining, system will analyze user's comments/feedback given for food items. It also includes adjectives separation.

The project predicts the missing item recommendations according to the information given by the user during registration. Data mining is used to extract the significant patterns from data. We have many online services for providing allergy-safe food recipes, but the number of the allergy-safe food products is very small compared to ordinary food products. Handling customers with better services for taking order, complete work in limited time and provide accurate services in time limit. In order to provide this service existing system is not efficient.

2.1 Objective of Project:

- 1) To develop an e-commerce application for food items.
- 2) To develop a food recommendation system and missing item in cart recommendation system.
- 3) In allergy food finding system, depending on food items ingredients and users profile, system will automatically find out allergy food items for particular user.
- 4) In opinion mining, system will analyze, users comments/feedback given for food item. Also, will give positive and negative adjectives matching using database.
- 5) To allow the customers to order instantaneously across anywhere around the area.

3. PROPOSED SYSTEM

The main objective of this allergy free food product system is to provide the most relevant healthy food to customer. The proposed system can be divided into following STEPS:

1) Customer Registration:

Customer is asked for his/her personal information such as name, email id, gender, and mob no., etc.

2) Customer login:

Customer login into the system using the login id and password.

3) Mention allergies:

In this step, the customer has to mention the allergies of the ingredients (if any) in any particular food product.

4) Detection of the allergies:

In this step, the system will detect the allergies of the customer and recommends him/her given allergy free food product. If the customer does not have any allergy then he/she can add the subjective food product to cart in order to buy it.

5) Mentions Allergy-free food product:

In this step, if the customer has any allergy of any ingredient of the product then the system mentions allergy-free food products to the customer. And if no, then system just recommends other different food products to the customer.

6) Recommendation of missing item:

In this step, if the customer doesn't have any allergy then the system recommends different food products other than the allergy ones. Lastly, if the customer wants to buy any of the mentioned or recommended food products then he/she just adds it to the cart.

4. FIGURES/CAPTIONS

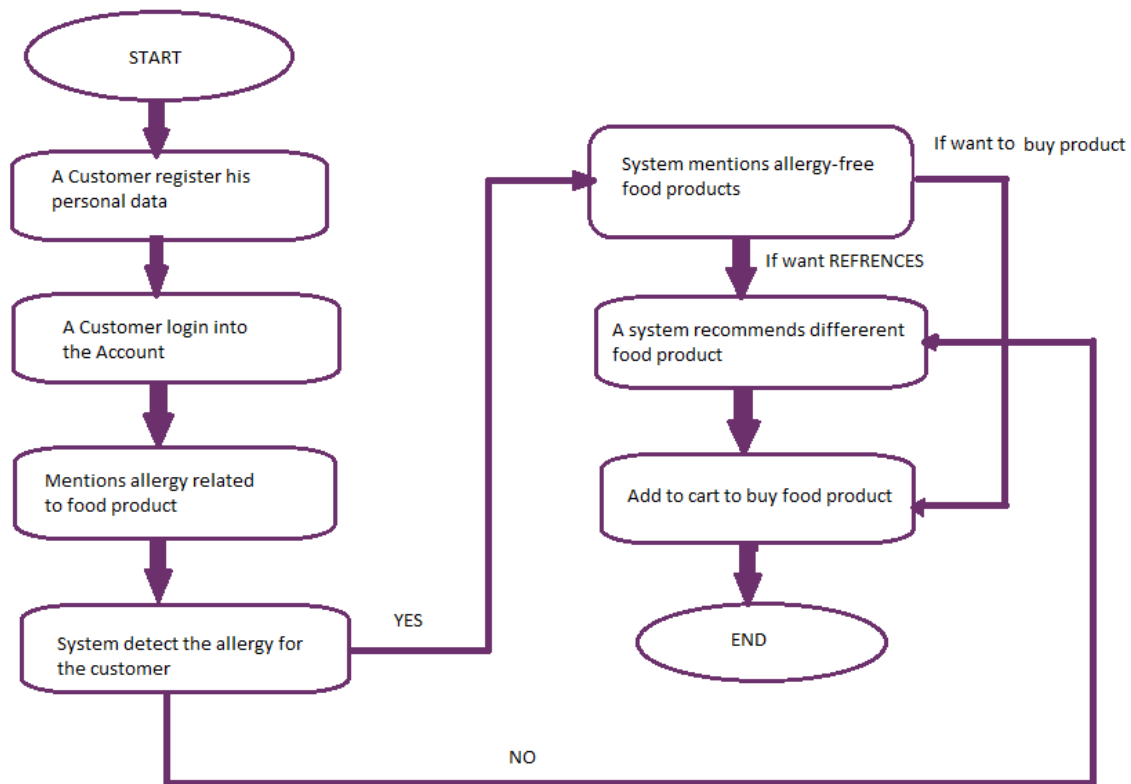


Fig1. Dataflow graph of proposed work

5. CONCLUSION

This system predicts missing items based on the partial data about the contents of a shopping cart, suggest same to the user. The project contains the number of different bakery product in which users gets variety of choices so the user can select a good one according to his occasion. In these we proposed a ingredient substitute recommendation method for allergy-safe cooking based on the food context extracted by recipe. In the project, we manually extract the food context of each recipe this time, but it takes too much time and effort. We will develop a method for extracting the food context automatically from online recipe sites. In addition, we will validate the effectiveness of our method by experiments using a larger recipe data set .This project gives the concept of opinion mining in which system will analyze, users comments/feedback given for food item and will give positive and negative adjectives matching using database.

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7. REFERENCES

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